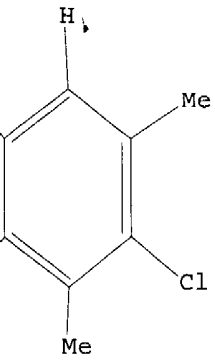

ucture attributes must be viewed using STN Express query preparation.

s l11
REGlstRY INITIATED
stance data SEARCH and crossover from CAS REGISTRY in progress...
DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

PLE SEARCH INITIATED 18:16:30 FILE 'REGISTRY'
PLE SCREEN SEARCH COMPLETED - 29 TO ITERATE

.0% PROCESSED 29 ITERATIONS 0 ANSWERS
RCH TIME: 00.00.01

L FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
JECTED ITERATIONS: 257 TO 903
JECTED ANSWERS: 0 TO 0

0 SEA SSS SAM L11

0 L12

s l11 full
REGlstRY INITIATED
stance data SEARCH and crossover from CAS REGISTRY in progress...
DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

L SEARCH INITIATED 18:16:39 FILE 'REGISTRY'
L SCREEN SEARCH COMPLETED - 610 TO ITERATE

.0% PROCESSED 610 ITERATIONS 1 ANSWERS
RCH TIME: 00.00.01

1 SEA SSS FUL L11

1 L14

d ibib abs hitstr

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN

CCESSION NUMBER: 1998:709043 CAPLUS
OCUMENT NUMBER: 129:316044
ITLE: 3-Cyano-2,4,5-trifluorobenzoyl fluoride and intermediates for its production
NVENTOR(S): Marhold, Albrecht; Wolfrum, Peter
ATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Germany
OURCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2
OCUMENT TYPE: Patent
ANGUAGE: German
AMILY ACC. NUM. COUNT: 1
ATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9847862	A1	19981029	WO 1998-EP2175	19980414
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
DE 19717231	A1	19981029	DE 1997-19717231	19970424
AU 9872163	A1	19981113	AU 1998-72163	19980414
EP 977729	A1	20000209	EP 1998-919266	19980414
EP 977729	B1	20020313		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, IE				
JP 2001521534	T2	20011106	JP 1998-544950	19980414
AT 214365	E	20020315	AT 1998-919266	19980414
ES 2174431	T3	20021101	ES 1998-919266	19980414
CN 1119324	B	20030827	CN 1998-804339	19980414
IL 131974	A1	20040219	IL 1998-131974	19980414
US 6229040	B1	20010508	US 1999-403263	19991015
US 2001023300	A1	20010920	US 2001-814132	20010321
US 6541675	B2	20030401		
US 2003092929	A1	20030515	US 2002-277310	20021022
US 6706918	B2	20040316		
CN 1436771	A	20030820	CN 2002-148153	20021031

PRIORITY APPLN. INFO.:		
DE 1997-19717231	A	19970424
WO 1998-EP2175	W	19980414
US 1999-403263	A3	19991015
US 2001-814132	A1	20010321

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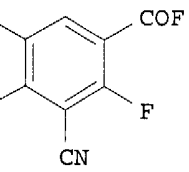


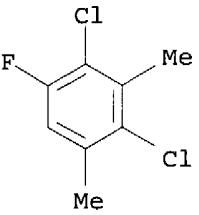
I

B 3-Cyano-2,4,5-trifluorobenzoyl fluoride (I) is prepared starting from 5-fluoro-m-xylene and proceeding via 2,4-dichloro-5-fluoro-1,3-dimethylbenzene, 2,4-dichloro-5-fluoro-3-(dichloromethyl)-1-(trichloromethyl)benzene, 2,4-dichloro-5-fluoro-3-(dichloromethyl)benzoic acid, 2,4-dichloro-5-fluoro-3-formylbenzoic acid (II), the oxime of II, and 2,4-dichloro-3-cyano-5-fluorobenzoyl chloride.

T **214774-61-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and chlorination of)

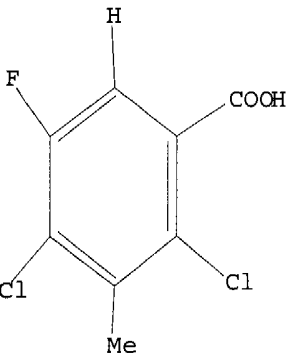
N 214774-61-5 CAPLUS

CN Benzene, 2,4-dichloro-1-fluoro-3,5-dimethyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d l1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1
REGISTRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 17:47:20 FILE 'REGISTRY'
SCREENING
SAMPLE SCREEN SEARCH COMPLETED - 6 TO ITERATE

100.0% PROCESSED 6 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.19

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 6 TO 266
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

L3 0 L2

=> s l1 full
REGISTRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 17:47:53 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 223 TO ITERATE

100.0% PROCESSED 223 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

L4 1 SEA SSS FUL L1

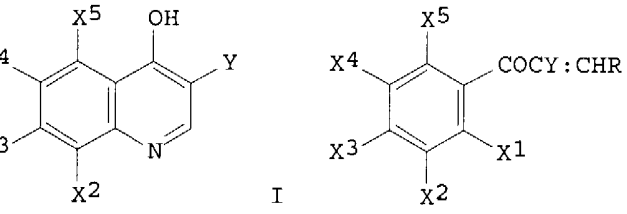
5 2 L4

> d 1-2 ibib abs hitstr

5 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
CCESSION NUMBER: 1988:94416 CAPLUS
OCUMENT NUMBER: 108:94416
ITLE: Preparation of 4-hydroxyquinoline-3-carboxylates as intermediates for antibacterial 4-quinolone-3-carboxylates
NVENTOR(S): Schriewer, Michael; Grohe, Klaus
ATENT ASSIGNEE(S): Bayer A.-G. , Fed. Rep. Ger.
OURCE: Ger. Offen., 11 pp.
CODEN: GWXXBX
OCUMENT TYPE: Patent
ANGUAGE: German
AMILY ACC. NUM. COUNT: 2
ATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3615767	A1	19871112	DE 1986-3615767	19860510
EP 245690	A1	19871119	EP 1987-106123	19870428
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
US 4804760	A	19890214	US 1987-43663	19870428
JP 62273957	A2	19871128	JP 1987-110944	19870508
HU 44514	A2	19880328	HU 1987-2091	19870508
HU 197311	B	19890328		
US 4870182	A	19890926	US 1988-189559	19880503
RIORITY APPLN. INFO.:			US 1985-795056	19851105
			DE 1986-3615767	19860510
			US 1987-43663	19870428

THER SOURCE(S): CASREACT 108:94416
I



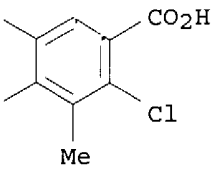
I II

B The title compds. I [Y = cyano, CO2R1, CONR2R3; R1, R2 = H, alkyl; R3 = R1, Ph; X2, X3, X4, X5 = H, halo, NO2, cyano, alkyl, alkoxy, alkylthio, alkylsulfonyl, (un)substituted PhSO2] were prepared by cyclization of benzoylacrylate II (R = NHW; X1 = halo, NO2, alkoxy, alkylthio, alkylsulfonyl, arylsulfonyl; W = H, CH2CH2Z; Z = cyano, CO2R4, CONR5R6; R4, R5 = R1; R6 = R3) by base in an aprotic solvent. Et (2,4-dichloro-5-fluoro-3-nitrobenzoyl)acetate (preparation given) was heated at 150-160° 3 h with HC(OEt)3 and Ac2O to give II (R = OEt, X1 = X3 = Cl, X2 = NO2, X4 = F, X5 = H) which was stirred 2 h with NH3 in EtOH to give the corresponding enamine II (R = NH2). The latter was stirred 24 h with KOCMe3 in dioxane to give I (Y = CO2Et, X2 = NO2, X3 = Cl, X4 = F, X5 = H).

T **103877-68-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in preparation of antibacterial intermediates)

N 103877-68-5 CAPLUS

N Benzoic acid, 2,4-dichloro-5-fluoro-3-methyl- (9CI) (CA INDEX NAME)

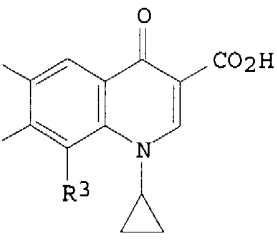


ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN

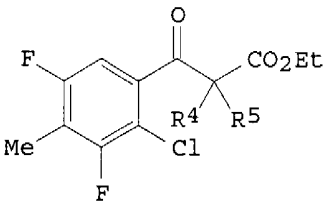
CESSION NUMBER:	1986:497345 CAPLUS
CUMENT NUMBER:	105:97345
TLE:	1-Cyclopropyl-1,4-dihydro-4-oxo-3-quinolinecarboxylic acids
VENTOR(S):	Grohe, Klaus; Schriewer, Michael; Zeiler, Hans Joachim; Metzger, Karl Georg
TENT ASSIGNEE(S):	Bayer A.-G. , Fed. Rep. Ger.
URCE:	Ger. Offen., 41 pp. CODEN: GWXXBX
CUMENT TYPE:	Patent
NGUAGE:	German
MILY ACC. NUM. COUNT:	2

TENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3441788	A1	19860515	DE 1984-3441788	19841115
AU 8549177	A1	19860522	AU 1985-49177	19851029
AU 572702	B2	19880512		
EP 181588	A2	19860521	EP 1985-114019	19851105
EP 181588	A3	19890201		
R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
US 4762844	A	19880809	US 1985-795056	19851105
CS 252835	B2	19871015	CS 1985-8132	19851112
FI 8504466	A	19860516	FI 1985-4466	19851113
ES 548843	A1	19861116	ES 1985-548843	19851113
CA 1260478	A1	19890926	CA 1985-495208	19851113
JP 61122272	A2	19860610	JP 1985-253881	19851114
ZA 8508733	A	19860730	ZA 1985-8733	19851114
BR 8505734	A	19860812	BR 1985-5734	19851114
HU 40422	A2	19861228	HU 1985-4347	19851114
HU 194178	B	19880128		
PL 145639	B1	19881031	PL 1985-256260	19851114
IORITY APPLN. INFO.:			DE 1984-3441788	19841115
HER SOURCE(S):	CASREACT 105:97345			



I



II

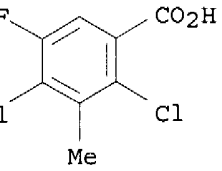
The title compds. (I; R1-R3 = H, NO2, alkyl, halo) were prepared as medical bactericides. Thus, 2,3,5,4-ClF2MeC6H5COCl was condensed with (EtO2C)2CH2 to give benzoylmalonate II (R4 = H, R5 = CO2Et), which was sequentially hydrolyzed, decarboxylated, ethoxymethylenated with (EtO)3CH, and condensed with cyclopropylamine to give II [R4R5 = (cyclopropylamino)methylene]. The latter compound was cyclized and deesterified to give I (R1 = R3 = F, R2 = Me) (III). III had a min. inhibitory concentration of 0.06% against Staphylococcus aureus 133.

103877-68-5P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and conversion of, to acid chloride)

N 103877-68-5 CAPLUS

N Benzoic acid, 2,4-dichloro-5-fluoro-3-methyl- (9CI) (CA INDEX NAME)



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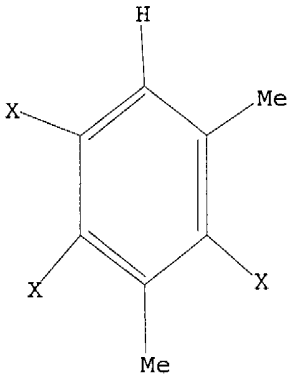
L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1
REGISTRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 13:34:49 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 5283 TO ITERATE

18.9% PROCESSED 1000 ITERATIONS 0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 101303 TO 110017
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

L3 0 L2

=> s l1 full
REGISTRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 13:34:55 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 107048 TO ITERATE

100.0% PROCESSED 107048 ITERATIONS 2 ANSWERS
SEARCH TIME: 00.00.01

L4 2 SEA SSS FUL L1

L5 2 L4

=> d 1-2 ibib abs hitstr

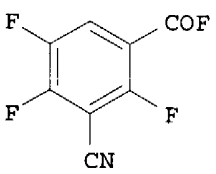
L5 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:709043 CAPLUS
DOCUMENT NUMBER: 129:316044
TITLE: 3-Cyano-2,4,5-trifluorobenzoyl fluoride and intermediates for its production
INVENTOR(S): Marhold, Albrecht; Wolfrum, Peter
PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Germany
SOURCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9847862	A1	19981029	WO 1998-EP2175	19980414
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
DE 19717231	A1	19981029	DE 1997-19717231	19970424
AU 9872163	A1	19981113	AU 1998-72163	19980414
EP 977729	A1	20000209	EP 1998-919266	19980414
EP 977729	B1	20020313		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, IE				
JP 2001521534	T2	20011106	JP 1998-544950	19980414
AT 214365	E	20020315	AT 1998-919266	19980414
ES 2174431	T3	20021101	ES 1998-919266	19980414
CN 1119324	B	20030827	CN 1998-804339	19980414
IL 131974	A1	20040219	IL 1998-131974	19980414
US 6229040	B1	20010508	US 1999-403263	19991015
US 2001023300	A1	20010920	US 2001-814132	20010321
US 6541675	B2	20030401		
US 2003092929	A1	20030515	US 2002-277310	20021022
US 6706918	B2	20040316		
CN 1436771	A	20030820	CN 2002-148153	20021031

PRIORITY APPLN. INFO.:

DE 1997-19717231	A	19970424
WO 1998-EP2175	W	19980414
US 1999-403263	A3	19991015
US 2001-814132	A1	20010321

GI



I

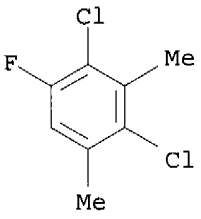
AB 3-Cyano-2,4,5-trifluorobenzoyl fluoride (I) is prepared starting from

5-fluoro-m-xylene and proceeding via 2,4-dichloro-5-fluoro-1,3-dimethylbenzene, 2,4-dichloro-5-fluoro-3-(dichloromethyl)-1-(trichloromethyl)benzene, 2,4-dichloro-5-fluoro-3-(dichloromethyl)benzoic acid, 2,4-dichloro-5-fluoro-3-formylbenzoic acid (II), the oxime of II, and 2,4-dichloro-3-cyano-5-fluorobenzoyl chloride.

IT **214774-61-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and chlorination of)

RN 214774-61-5 CAPLUS

CN Benzene, 2,4-dichloro-1-fluoro-3,5-dimethyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1978:597146 CAPLUS

DOCUMENT NUMBER: 89:197146

TITLE: Ring-chlorinated xylenes

INVENTOR(S): Blumenfeld, Georg; Riegger, Paul

PATENT ASSIGNEE(S): Dynamit Nobel A.-G., Fed. Rep. Ger.

SOURCE: Ger. Offen., 18 pp.
CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

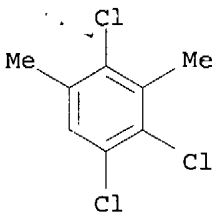
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2702829	A1	19780727	DE 1977-2702829	19770125
US 4166075	A	19790828	US 1978-870400	19780118
JP 53092718	A2	19780815	JP 1978-6084	19780123
BE 863248	A1	19780516	BE 1978-184580	19780124
NL 7800863	A	19780727	NL 1978-863	19780124
FR 2377988	A1	19780818	FR 1978-1865	19780124
GB 1578411	A	19801105	GB 1978-2893	19780124
PRIORITY APPLN. INFO.:			DE 1977-2702829	19770125

AB Xylenes were ring-chlorinated with Cl2 in the presence of catalyst system of an iron halide or antimony halide with an aliphatic hydrocarbon, optionally halogenated, with an oxygen function, as cocatalyst. Thus, chlorinating p-xylene in CCl4 containing FeCl3 and cocatalyst MeOH, EtOH, PrOH, Me2CHOH, Me2CHCH2OH, Me3COH, trichloro-tert-Bu alc., HCO2H, AcOH, EtCO2H, Me2CHCO2H, or Me3CCO2H gave 0.1 and 0.6% 1,4-Me2C6H3Cl (with AcOH and HCO2H), 54.0-78% 1,4-Me2C6H2Cl2-2,5, 8.1-22.6% 1,4-Me2C6H2Cl2-2,3, and 3.45-27.1% 1,4-Me2C6HCl3, with 88.2-99.1% conversion. Omitting a cocatalyst gave 4.8% 1,4-Me2C6H3Cl, 49.9% 1,4-Me2C6H2Cl2-2,5, 20.4% 1,4-Me2C6H2Cl2-2,3, and 22.9% 1,4-Me2C6HCl3, with 98% conversion.

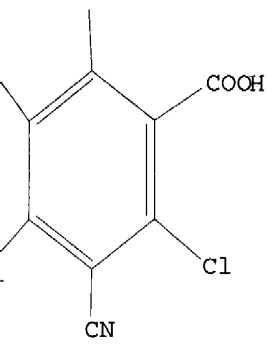
IT **68266-71-7**
RL: RCT (Reactant); RACT (Reactant or reagent)
(improved chlorination procedure for)

RN 68266-71-7 CAPLUS

CN Benzene, 1,2,4-trichloro-3,5-dimethyl- (9CI) (CA INDEX NAME)


Cl
Me
Me
Cl
Cl

5 'HAS NO ANSWERS
5 STR



tructure attributes must be viewed using STN Express query preparation.

s l6
REGlstRY INITIATED
ubstance data SEARCH and crossover from CAS REGISTRY in progress...
e DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

AMPLE SEARCH INITIATED 17:51:17 FILE 'REGISTRY'
AMPLE SCREEN SEARCH COMPLETED - 9 TO ITERATE

0.0% PROCESSED 9 ITERATIONS 0 ANSWERS
EARCH TIME: 00.00.01

ULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
ROJECTED ITERATIONS: 9 TO 360
ROJECTED ANSWERS: 0 TO 0

0 SEA SSS SAM L6

0 L7

s l6 full
REGlstRY INITIATED
bstance data SEARCH and crossover from CAS REGISTRY in progress...
e DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

ULL SEARCH INITIATED 17:51:37 FILE 'REGISTRY'
ULL SCREEN SEARCH COMPLETED - 154 TO ITERATE

0.0% PROCESSED 154 ITERATIONS 1 ANSWERS
ARCH TIME: 00.00.01

1 SEA SSS FUL L6

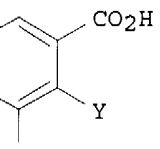
0 3 L9

d 1-3 ibib abs hitstr

ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
SSION NUMBER: 1999:101296 CAPLUS
MENT NUMBER: 130:139168
E: Preparation of 3-cyano-2,4-dihalo-5-fluorobenzoic acid by hydrolysis of the corresponding amides, nitriles, or esters.
NTOR(S): Hallenbach, Werner; Marhold, Albrecht
NT ASSIGNEE(S): Bayer A.-G., Germany
CE: Ger. Offen., 18 pp.
CODEN: GWXXBX
MENT TYPE: Patent
UAGE: German
LY ACC. NUM. COUNT: 1
NT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19733243	A1	19990204	DE 1997-19733243	19970801
WO 9906360	A1	19990211	WO 1998-EP4468	19980718
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9891544	A1	19990222	AU 1998-91544	19980718
AU 744367	B2	20020221		
EP 1001929	A1	20000524	EP 1998-943740	19980718
EP 1001929	B1	20030326		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
BR 9811579	A	20000822	BR 1998-11579	19980718
JP 2001512098	T2	20010821	JP 2000-505122	19980718
NZ 502587	A	20020531	NZ 1998-502587	19980718
AT 235461	E	20030415	AT 1998-943740	19980718
PT 1001929	T	20030731	PT 1998-943740	19980718
ES 2190602	T3	20030801	ES 1998-943740	19980718
CN 1125042	B	20031022	CN 1998-807849	19980718
RU 2214998	C2	20031027	RU 2000-105245	19980718
US 6462218	B1	20021008	US 2000-463272	20000124
MX 200000861	A	20001109	MX 2000-861	20000125
RITY APPLN. INFO.:			DE 1997-19733243 A	19970801
			WO 1998-EP4468 W	19980718

R SOURCE(S): CASREACT 130:139168



I

Title compds. (I; X, Y = halo) were prepared by hydrolysis of the corresponding 3-cyano-2,4-dihalo-5-fluorobenzamides, 1,3-dicyano-2,4-dihalo-5-fluorobenzenes, or 3-cyano-2,4-dihalo-5-fluorobenzoate esters. Thus, 3-cyano-2,4-dichloro-5-fluorobenzamide was refluxed 3 h with concentrate aqueous HCl to give 3-cyano-2,4-dichloro-5-fluorobenzoic acid.

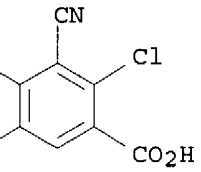
117528-58-2P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of 3-cyano-2,4-dihalo-5-fluorobenzoic acid by hydrolysis of the corresponding amides, nitriles, or esters)

117528-58-2 CAPLUS

Benzoic acid, 2,4-dichloro-3-cyano-5-fluoro- (9CI) (CA INDEX NAME)



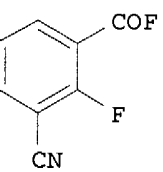
ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

ESSION NUMBER: 1998:709043 CAPLUS
UMENT NUMBER: 129:316044
LE: 3-Cyano-2,4,5-trifluorobenzoyl fluoride and intermediates for its production
ENTOR(S): Marhold, Albrecht; Wolfrum, Peter
ENT ASSIGNEE(S): Bayer Aktiengesellschaft, Germany
RCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2
UMENT TYPE: Patent
GUAGE: German
ILY ACC. NUM. COUNT: 1
ENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9847862	A1	19981029	WO 1998-EP2175	19980414
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
DE 19717231	A1	19981029	DE 1997-19717231	19970424
AU 9872163	A1	19981113	AU 1998-72163	19980414
EP 977729	A1	20000209	EP 1998-919266	19980414
EP 977729	B1	20020313		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, IE				
JP 2001521534	T2	20011106	JP 1998-544950	19980414
AT 214365	E	20020315	AT 1998-919266	19980414
ES 2174431	T3	20021101	ES 1998-919266	19980414
CN 1119324	B	20030827	CN 1998-804339	19980414
IL 131974	A1	20040219	IL 1998-131974	19980414
US 6229040	B1	20010508	US 1999-403263	19991015
US 2001023300	A1	20010920	US 2001-814132	20010321
US 6541675	B2	20030401		
US 2003092929	A1	20030515	US 2002-277310	20021022
US 6706918	B2	20040316		
CN 1436771	A	20030820	CN 2002-148153	20021031

ORITY APPLN. INFO.:

DE 1997-19717231	A	19970424
WO 1998-EP2175	W	19980414
US 1999-403263	A3	19991015
US 2001-814132	A1	20010321



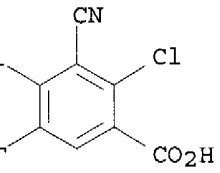
I

3 ` 3-Cyano-2,4,5-trifluorobenzoyl fluoride (I) is prepared starting from 5-fluoro-m-xylene and proceeding via 2,4-dichloro-5-fluoro-1,3-dimethylbenzene, 2,4-dichloro-5-fluoro-3-(dichloromethyl)-1-(trichloromethyl)benzene, 2,4-dichloro-5-fluoro-3-(dichloromethyl)benzoic acid, 2,4-dichloro-5-fluoro-3-formylbenzoic acid (II), the oxime of II, and 2,4-dichloro-3-cyano-5-fluorobenzoyl chloride.

T **117528-58-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

N 117528-58-2 CAPLUS

N Benzoic acid, 2,4-dichloro-3-cyano-5-fluoro- (9CI) (CA INDEX NAME)



EFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

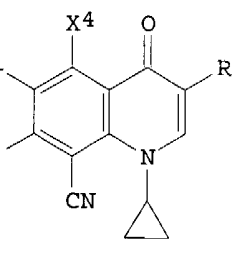
10 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

CCESSION NUMBER:	1988:630824 CAPLUS
OCUMENT NUMBER:	109:230824
ITLE:	8-Cyano-1-cyclopropylquinolonecarboxylic acids as antibacterial agents
NVENTOR(S):	Schriewer, Michael; Grohe, Klaus; Petersen, Uwe; Haller, Ingo; Metzger, Karl Georg; Endermann, Rainer; Zeiler, Hans Joachim
ATENT ASSIGNEE(S):	Bayer A.-G., Fed. Rep. Ger.
OURCE:	Ger. Offen., 20 pp. CODEN: GWXXBX
OCUMENT TYPE:	Patent
ANGUAGE:	German
AMILY ACC. NUM. COUNT:	1

ATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3702393	A1	19880811	DE 1987-3702393	19870128
US 4908366	A	19900313	US 1988-144884	19880114
EP 276700	A1	19880803	EP 1988-100503	19880115
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, SE				
CA 1314544	A1	19930316	CA 1988-557311	19880126
JP 63201170	A2	19880819	JP 1988-14771	19880127
US 5051418	A	19910924	US 1989-434666	19891113
US 5190955	A	19930302	US 1991-645751	19910125
RIORITY APPLN. INFO.:			DE 1987-3702393	19870128
			US 1988-144884	19880114
			US 1989-434666	19891113

THER SOURCE(S): CASREACT 109:230824; MARPAT 109:230824



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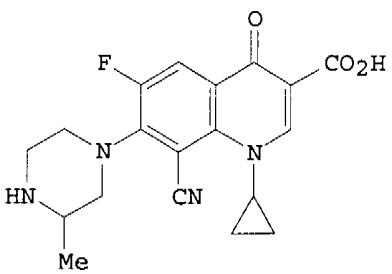


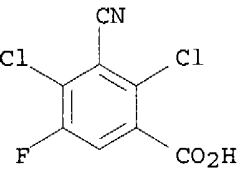
III

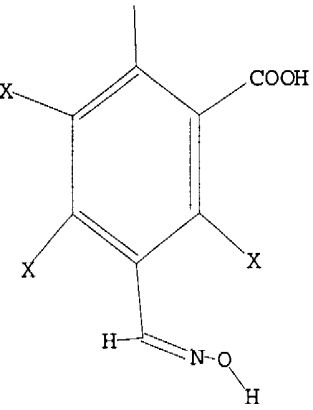
AB The title compds. [I; R = CO2H, cyano, CO2R1, CONR2R3; R1 = alkyl; R2 = H, alkyl; R3 = R2, (un)substituted Ph; X1 = H, NO2, alkyl, halo; X2 = heterocyclyl; X4 = H, halo, alkyl] were prepared as antibacterial agents (no data). 2,4,5,3-Cl2F(NC)C6HCOCH2CO2Et (preparation given) was heated 2 h at 150° with HC(OEt)3 in Ac2O to give 2,4,5,3-Cl2F(NC)C6HCOC(:CHR4)CO2Et (II; R4 = OEt) which was stirred 2 h with cyclopropylamine in EtOH to give II (R = cyclopropylamino). The latter was stirred 24 h in dioxane containing KOCMe3 to give, after saponification, I (R = CO2H, X1 = F, X2 = Cl, X4 = H) which was heated 3 h in dioxane with 2-methylpiperazine to give title compound III. Tablets were prepared each containing III 583.0, cellulose 55.0, starch 72.0, polyvinylpyrrolidone 30.0, silica 5.0, and Mg stearate 5.0 mg coated with poly(O-hydroxypropyl-O-methyl)cellulose 6.0, Macrogol 4000 2.0, TiO2 2.0 mg, and polyethyleneglycol (no amount given).

IT **117528-58-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in preparation of antibacterial agents)

RN 117528-58-2 CAPLUS

CN Benzoic acid, 2,4-dichloro-3-cyano-5-fluoro- (9CI) (CA INDEX NAME)





Structure attributes must be viewed using STN Express query preparation.

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Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

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100.0% PROCESSED 10 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

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PROJECTED ANSWERS: 0 TO 0

L10 0 SEA SSS SAM L9

L11 0 L10

=> s l9 full
   REGIstRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

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FULL SCREEN SEARCH COMPLETED - 187 TO ITERATE

100.0% PROCESSED 187 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

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L13 1 L12

> d ibib abs hitstr

13 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN
CCESSION NUMBER: 1998:709043 CAPLUS
OCUMENT NUMBER: 129:316044
ITLE: 3-Cyano-2,4,5-trifluorobenzoyl fluoride and intermediates for its production
NVENTOR(S): Marhold, Albrecht; Wolfrum, Peter
ATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Germany
OURCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2
OCUMENT TYPE: Patent
ANGUAGE: German
AMILY ACC. NUM. COUNT: 1
ATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9847862	A1	19981029	WO 1998-EP2175	19980414
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
DE 19717231	A1	19981029	DE 1997-19717231	19970424
AU 9872163	A1	19981113	AU 1998-72163	19980414
EP 977729	A1	20000209	EP 1998-919266	19980414
EP 977729	B1	20020313		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, IE				
JP 2001521534	T2	20011106	JP 1998-544950	19980414
AT 214365	E	20020315	AT 1998-919266	19980414
ES 2174431	T3	20021101	ES 1998-919266	19980414
CN 1119324	B	20030827	CN 1998-804339	19980414
IL 131974	A1	20040219	IL 1998-131974	19980414
US 6229040	B1	20010508	US 1999-403263	19991015
US 2001023300	A1	20010920	US 2001-814132	20010321
US 6541675	B2	20030401		
US 2003092929	A1	20030515	US 2002-277310	20021022
US 6706918	B2	20040316		
CN 1436771	A	20030820	CN 2002-148153	20021031

RIORITY APPLN. INFO.:

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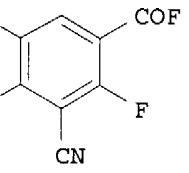
WO 1998-EP2175	W	19980414
US 1999-403263	A3	19991015
US 2001-814132	A1	20010321



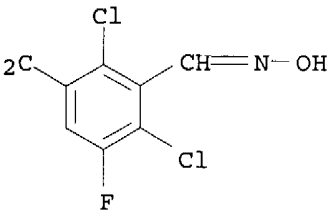
I

3-Cyano-2,4,5-trifluorobenzoyl fluoride (I) is prepared starting from 5-fluoro-m-xylene and proceeding via 2,4-dichloro-5-fluoro-1,3-dimethylbenzene, 2,4-dichloro-5-fluoro-3-(dichloromethyl)-1-(trichloromethyl)benzene, 2,4-dichloro-5-fluoro-3-(dichloromethyl)benzoic acid, 2,4-dichloro-5-fluoro-3-formylbenzoic acid (II), the oxime of II, and 2,4-dichloro-3-cyano-5-fluorobenzoyl chloride.

214774-57-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and chlorination-dehydration of)
214774-57-9 CAPLUS
Benzoic acid, 2,4-dichloro-5-fluoro-3-[(hydroxyimino)methyl]- (9CI) (CA INDEX NAME)



FERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT